

# CLAIMS

1. A direct heating tube which directly heats a fluid during the passage of the fluid, characterized in that in a desired portion of the tube to be heated, a second heated tube which is connected to a first heated tube is provided outside the first heated tube.

2. The direct heating tube according to claim 1, characterized in that the second heated tube is provided along a full length of the desired portion of the direct heating tube to be heated.

3. The direct heating tube according to claim 1, characterized in that the second heated tube is provided in both end portions of the desired portion of the direct heating tube to be heated.

4. The direct heating tube according to claim 1, characterized in that the second heated tube is provided in one end portion of the desired portion of the direct heating tube to be heated.

5. The direct heating tube according to any one of claims 1 to 4, characterized in that an electrode portion is connected to the second heated tube.

6. The direct heating tube according to claim 5, characterized in that an electrode portion is connected directly to the second heated tube.

7. The direct heating tube according to any one of claims 1 to 6, characterized in that a change in gradient is provided in a wall thickness of the first heated tube and/or the second heated tube.

8. The direct heating tube according to any one of claims 1 to 7, characterized in that the direct heating tube is a column or a heat tube.

9. A method of heating a fluid passing through a tube, wherein in a desired portion of the tube to be heated, by use of a direct heating tube which is constructed in such a manner that a second heated tube connected to a first heated tube is provided outside the first heated tube, a fluid passing through the tube is heated by connecting an electrode portion to the second heated tube and heating the first heated tube.